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This listing of claims will replace all prior versions, and listings, of claims in the application (note that amendments are highlighted in **bold**):

# **Listing of Claims:**

(amended) A compound represented by the structural formula

formula I

or a pharmaceutically acceptable salt or solvate wherein

X is -CH<sub>2</sub>-, -SO<sub>2</sub>-, carbonyl, -CHCH<sub>3</sub> or -C(CH<sub>3</sub>)<sub>2</sub>-;

Y is  $-(CR^2R^3)_pC(O)NH$ -,  $-(CR^2R^3)_pNH$ -,  $-C(O)(CR^2R^3)_pNH$ -, -C(O)C(O)NH- or  $-C(O)(CR^2R^3)_p$ -, wherein p is a number from 1 to 3 and when p is more than 1, each  $(CR^2R^3)$  can be the same or different;

n is 0, 2 or 3, and when n is 0, such that no connecting bond exists between the two carbons adjacent to the nitrogen;

r is 1-a number from 0 to 1 and when r is 0, X is directly linked to the aromatic ring:

Ar is aryl, heteroaryl, or R<sup>6</sup>-substituted aryl or R<sup>6</sup>-substituted heteroaryl;

 $R^1$  is hydrogen, -alkyl, -cycloalkyl, aralkyl, heterocyclyl, heteroaralkyl, -C(O) $R^5$ , -C(O) $R^6$ , -C(O) $R^8$  $R^9$ ,-SO<sub>2</sub> $R^5$ , -SO<sub>2</sub> $R^8$  $R^9$ , aryl, heteroaryl, -CF<sub>3</sub>,-alkyl substituted with  $R^{10}$ , -cycloalkylalkyl, -cycloalkylalkyl substituted with  $R^{10}$  on the cycloalkyl ring,

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R<sup>2</sup> and R<sup>3</sup> can be the same or different, each being independently hydrogen or –alkyl; or R<sup>2</sup> and R<sup>3</sup> can be joined together with the carbon to which they are attached to form a 3 to 7-membered ring;

R<sup>4</sup> is aryl, <del>heteroaryl</del>, R<sup>7</sup>-substituted aryl, <del>R<sup>7</sup>-substituted heteroaryl</del> or

R<sup>5</sup> is -alkyl, aryl, aralkyl or heteroaryl;

 $R^6$  is 1 to  $\underline{3}$  5 substituents, each  $R^6$  can be the same or different and each is independently selected from the group consisting of -OH, -alkoxy, -OCF<sub>3</sub>, -CN, -alkyl, halogen, -NR<sup>8</sup>R<sup>9</sup>, -C(O)NR<sup>8</sup>R<sup>9</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>5</sup>, -SO<sub>2</sub>NR<sup>6</sup>R<sup>9</sup>, -SO<sub>2</sub>R<sup>5</sup>, -C(O)R<sup>5</sup>, -C(O)OR<sup>5</sup>, -CF<sub>3</sub>, -(CR<sup>2</sup>R<sup>3</sup>)<sub>p"</sub>NR<sup>8</sup>R<sup>9</sup> where p" is a number from 1 to 3, -CHO,

 $R^7$  is hydrogen or 1 to 4 substituents, each  $R^7$  can be the same or different and each is independently selected from the group consisting of -OH, -alkoxy, -OCF<sub>3</sub>, -CN, halogen, -nitro, -NR<sup>8</sup>R<sup>9</sup>, -NR<sup>8</sup>C(O)R<sup>5</sup>, -C(O)NR<sup>8</sup>R<sup>9</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>5</sup>, -SO<sub>2</sub>NR<sup>8</sup>R<sup>9</sup>, -SO<sub>2</sub>R<sup>5</sup>, -C(O)R<sup>5</sup>, -C(O)OR<sup>8</sup>, -CF<sub>3</sub>, -(CR<sup>2</sup>R<sup>3</sup>)<sub>p</sub>-NR<sup>8</sup>R<sup>9</sup>, -(CR<sup>2</sup>R<sup>3</sup>)<sub>p</sub>-NR<sup>8</sup>C(O)R<sup>5</sup> where p" is a number from 1 to 3, -C(=NH)NR<sup>8</sup>R<sup>9</sup>, -C(=NCN)NR<sup>8</sup>R<sup>9</sup> and -CHO; or two adjacent R<sup>7</sup> groups can be joined together to form a methylenedioxy or ethylenedioxy group;

R<sup>8</sup> is hydrogen or -alkyl;

R<sup>9</sup> is hydrogen, -alkyl, aryl, substituted aryl, heteroaryl or aralkyl; and

 $R^{10}$  is –OH, -alkoxy, -cycloalkyl, -cycloalkylalkyl, -C(O)NR<sup>8</sup>R<sup>9</sup>, -NR<sup>8</sup>R<sup>9</sup>, -NR<sup>8</sup>C(O)R<sup>5</sup>, -NR<sup>8</sup>C(O)NR<sup>8</sup>R<sup>9</sup>,-C(O)OH or –C(O)OR<sup>5</sup>.

(amended) The compound of claim 1 wherein
X is -SO<sub>2</sub>-;

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## Y is-C(R2R3),C(Q)NH-;

R<sup>2</sup> and R<sup>3</sup> are hydrogen or alkyl;

### <u>and</u>

n is 0;

#### and

<del>r is 0</del>.

- (original) The compound of claim 2 wherein R<sup>2</sup> and R<sup>3</sup> are hydrogen. 3.
- (amended) The compound of claim 1 wherein 4.

X is carbonyl;

Y is-C(R2R3),C(O)NH-;

R<sup>2</sup> and R<sup>3</sup> are hydrogen or alkyl;

#### and

n is 0;

#### and

<del>r is-0</del>.

- (original) The compound of claim 4 wherein  $\mathbb{R}^2$  and  $\mathbb{R}^3$  are hydrogen. 5.
- (amended) The compound of claim 1 wherein 6.

X is -CH<sub>2</sub>-;

R1 is hydrogen, -aikyl, -cycloalkyl, -cycloalkylalkyl, heteroaralkyl, heterocyclyl, -alkyl substituted with -cycloalkyl, -alkyl substituted with R<sup>10</sup>, -SO<sub>2</sub>NR<sup>8</sup>R<sup>9</sup>, -SO<sub>2</sub>R<sup>5</sup>; -C(O)R<sup>5</sup> or -C(O)OR<sup>5</sup>;

R<sup>2</sup> and R<sup>3</sup> are hydrogen or alkyl;

n is 0;

r is 1:

and

Ar is anyl or R<sup>6</sup>-substituted anyl.

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7. (original) The compound of claim 6 wherein

R<sup>1</sup> is hydrogen, methyl, ethyl, hydroxyethyl, cyclobutyl, cyclopentyl, cycloheptyl, -propyl, -SO<sub>2</sub>CH<sub>3</sub>, -SO<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>, -COCH<sub>3</sub>, -C(O)OC(CH<sub>3</sub>)<sub>3</sub>, isopropyl,

cyclopropylmethyl, heteroaryl,

R<sup>2</sup> and R<sup>3</sup> are hydrogen;

Ar is R<sup>6</sup>-substituted aryl;

R<sup>6</sup> is 1 to 5 substituents which can be the same or different and each is independently selected from the group consisting of halogen, -CF<sub>3</sub>, -OCF<sub>3</sub>, -CN,

-CHO, -SO<sub>2</sub>R<sup>5</sup>, -C(O)OR<sup>8</sup>, -C(O)R<sup>5</sup>, -C(O)NR<sup>8</sup>R<sup>9</sup> and 
$$\overset{\text{N}}{\text{H}}$$
 : and

R<sup>7</sup> is two substituents which can be the same or different and independently selected from halogen, -CN and --CF<sub>3</sub>.

- 8. (original) The compound of claim 7 wherein R<sup>6</sup> is one substituent.
- 9. (original) The compound of claim 8 wherein R<sup>6</sup> is at the meta position of Ar.
- 10. (original) The compound of claim 9 wherein R<sup>6</sup> is -CN.
- 11. (original) The compound of claim 9 wherein R<sup>6</sup> is -C(=NH)NHaryl or -C(=NH)NH₂.
- 12. (original) The compound of claim 10 wherein R<sup>7</sup> is selected from the group consisting of CI, F and –CF<sub>3</sub>.
- 13. (original) The compound of claim 1 wherein R<sup>1</sup> is hydrogen, methyl, ethyl, hydroxyethyl, cyclobutyl, cyclopentyl, cycloheptyl, -propyl, -SO<sub>2</sub>CH<sub>3</sub>, -SO<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>,

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-COCH<sub>3</sub>, -C(O)OC(CH<sub>3</sub>)<sub>3</sub>, isopropyl, cyclopropylmethyl, heteroaryl,

14. (amended) The compound of claim 1 wherein

X is -CH<sub>2</sub>-;

n is 0;

r is 1;

Ar is R<sup>6</sup>-substituted aryl;

R<sup>1</sup> is alkyl or cyclopropylmethyl;

R<sup>6</sup> is -CN and is substituted at the meta position of Ar.

and

R<sup>7</sup> is hydrogen or halogen.

- 15. (original) The compound of claim 14 wherein R<sup>7</sup> is chloride or fluoride.
- 16. (original) A compound selected from the group consisting of

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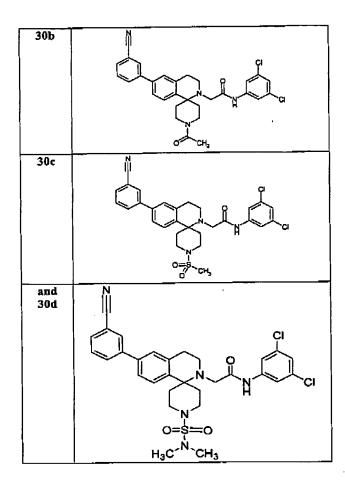
7a	H <sub>3</sub> C CH <sub>3</sub>
7e	H <sup>1</sup> CC CH <sup>2</sup>
8a	N N N N N N N N N N N N N N N N N N N
10c	
11c	

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or a pharmaceutically acceptable salt or solvate.

- 17. (original) A pharmaceutical composition comprising a therapeutically effective amount of at least one compound of claim 1 in combination with at least one pharmaceutically acceptable carrier.
- 18. (amended) A method of treating a metabolic disorder obesity, an eating disorder hyperphagia or diabetes comprising administering a therapeutically effective amount of at least one compound of claim 1 to a patient in need of such treatment.

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- 19. (amended ) A method of treating an eating disorder hyperphagia comprising administering to a patient in need of such treatment a therapeutically effective amount of at least one compound of claim 1, or a pharmaceutically acceptable salt or solvate of said compound.
- 20. (original) A pharmaceutical composition comprising a therapeutically effective amount of at least one compound of claim 16 in combination with at least one pharmaceutically acceptable carrier.
- 21. (amended) A method of treating <u>a metabolic disorder obesity</u>, <u>an eating</u> <u>disorder hyperphagia</u> or diabetes comprising administering a therapeutically effective amount of at least one compound of claim 16 to a patient in need of such treatment.
- 22. (amended) A method of treating an eating disorder <u>hyperphagia</u> comprising administering to a patient in need of such treatment a therapeutically effective amount of at least one compound of claim 16, or a pharmaceutically acceptable salt or solvate of said compound.

Claims 23-24 (canceled)

- 25. (original) A method of treating a disorder associated with obesity comprising administering to a patient in need of such treatment a therapeutically effective amount of at least one compound of claim 1, or a pharmaceutically acceptable salt or solvate of said compound.
- 26. (original) The method of claim 25 wherein said disorder associated with obesity is at least one of type II diabetes, insulin resistance, hyperlipidemia or hypertension.

Claims 27-30 (canceled)